

In Defense of Chums

In a previous email I requested an explanation on why biologists love chum. Charles Thirkill has quickly responded with excellent reasons - just as I hoped he would.

The attached photos are the ones taken during my portion of the walk with him last Saturday. I highly recommend it.

Bernie Heinrichs

Hi Bernie:

Thank you once again for your work yesterday. It was an epic walk; the stuff of legend. I doubt we will ever see its like again in our time. The proof of the value of those baffles we placed in the river could be made more evident only if a flight of angels had come down on us bearing manna from heaven. It was that good. I should correct myself and say that there were probably 1,500 live chum and 1,500-2,000 dead, since we have to assume we missed some fish, especially the dead.

I hear your question on the value of Chum salmon, so let me offer these suggestions by way of answer. Each of the Chum we saw yesterday represent an average 2-kg package of flesh that will be quickly rendered into fertiliser. If there are a total of 5,000 of them - there may still be fish coming in - that adds up to a staggering 10,000 kg or ten metric tonnes of fertiliser, brought in from the Pacific Ocean to enrich the Chase River. That is the single largest pulse of nutrient that river will see in the course of the year. Regardless of the fate of that flesh, whether it be eaten by predators or scavengers, or just left to rot in situ, it will provide nutrient for the plant life and some insects that are the base of the food chain in the system. Not only does it contain the nitrogen and phosphorus we all think of in fertiliser, but it also contains every micronutrient needed for life. The fry already in the creek will feed off the flesh as it rots, which might make some of us think twice about eating salmon.

Not only that, but the nitrogen and phosphorus will be taken up by the roots of the riparian trees to let them grow another season. It has been well-documented that trees grow twice as quickly if there are salmon to fertilise them. The effect is carried well into the forest, away from the water, by bears, eagles, otters and racoons etc. When 35 million Sockeye go up the Fraser River, along with several million other fish, well, you do the math.

In addition, if the larger Coho fry are piscivorous, they will eat the Chum fry as they migrate to sea. Also, Chum linger for a few days or weeks in the creek, but they provide food for other predators, such as sculpin, that would otherwise eat Coho.

The chum adults are big, strong fish and they plough the gravel in advance of the Coho, loosening the gravel for them to use.

Chums are low in fat, so they preserve better than e.g. Pinks. The smoked Chum is among the finest delicacies in the world, bar none. The Natives knew this long before Mr. St. Jeans set up in business.

Anyway, those are some of the reasons why fisheries biologists like Chum salmon and it is the reason why in 1993, when Steve Toth and Bruce Murray surveyed the Cat Stream for Malaspina University-College, they recommended that Chum be re-introduced into the system to enrich it for Coho. They were right, but it took a while, and it was the baffles that did it, not a trap-and-truck band-aid.

If the above fails to inspire respect for Chum salmon, consider this: they can change sex in seconds. As part of their spawning strategy, Chum males can change colours to resemble females, and vice versa. This enables males to slip into a spawning melee and fertilize eggs, right under the nose of the dominant male.

Thanks again for you help. It may be tempting fate, but I plan to do that walk again, probably next Saturday. My reasons are to document the fish for DFO and to help train other people so they can do the same. DFO need this data and the Stock Assessment Division is essentially bankrupt for funds to pay for it. The Chase River, including the Cat Stream, Beck Creek and Departure Creek could all be surveyed weekly from now until early December. I did it for six years and was well-paid. Perhaps I can repay the biologists for their generosity. Sure as hell, this is the most interesting time in the history of the fishery because we could be on the cusp of a resurgence. All it takes is a pair of waders, a wading staff, a hat, a notebook, a pair of counters and a good pair of legs. If anyone were to do part of the walk, I would suggest they walk from the railway culvert at the end of Ninth Street, to the railway bridge at the mouth of the Chase River. It is about 2.5 km and there will be hundreds of chum, mostly dead, unfortunately. Anyone curious enough to do it should let me know.

Cheers,

Charles





Fish Ladder in Cat Stream



Huge Alder



Jean-Michel & Charles



We do not want to see this!